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April 29, 2002

"Express Mail" mailing number.: \_\_\_ET871448814US

Date of Deposit \_\_\_\_April 29, 2002

I hereby certify that this paper and all papers and fees referred to herein are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Commissioner of Patents, c/o U.S. Patent and Trademark Office, BOXISEQUENCE, P.O. Box 2327, Arlington, Virginia 222027

Holly A. Wolfe

Commissioner for Patents c/o United States Patent and Trademark Office BOX SEQUENCE P.O. Box 2327 Arlington, Virginia 22202

Re: U.S. Patent Application Serial No. 10/000,151 for HUMAN KCR1

REGULATION OF HERG POTASSIUM CHANNEL BLOCK

Our File No.: 1242/49/2

Sir:

# Enclosed please find the following:

- 1. Preliminary Amendment and Response to Notice to File Missing Parts of Non-provisional Application (3 pages) with copy of Notice;
- 2. An original executed Declaration (2 pages);
- 3. An executed Assignment (2 pages);
- 4. Recordation Form Cover Sheet (Form PTO-1595) (1 page in duplicate);
- 5. Nine (9) sheets of formal drawings and related drawings transmittal;
- 6. Paper and Computer Readable Copies of the Sequence Listing, along with a

Commissioner for Pater April 29, 2002 Page 2

> Statement that Sequence Listing and Computer Readable Copy are the Same, and a copy of the Raw Sequence Listing Error Report;

- Fee Transmittal (Form PTO/SB/17) in duplicate; and 7.
- A return-receipt postcard to be returned to our offices with the U.S. Patent 8. and Trademark filing stamp thereon

Please contact our offices if there are any questions with this matter.

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account Number 50-0426.

Respectfully submitted,

JENKINS & WILSON, P.A.

Arles A. Taylor, Jr.

Registration No. 39,395

Customer No. Bar Code Label:

les a. Igla .).

1242/49/2

Enclosures

PATENT TRADEMARK OFFICE

PTO/SB/17 (11-01)
Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

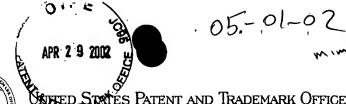
Under the Paperwork Reduction Act of 199	5, no persons are required to	respond to a collection of inf	ormation unless it displays a valid OMB control nu	mber.	
E FEE TRANSMITTAL		Complete if Known			
- 1		Application Number	10/000,151		
for FY 2	0002	Filing Date	October 30, 2001		
		First Named Inventor	Jeffrey R. Balser		
Applicate claims small entity status. See 37 CFR 1.27		Examiner Name	Unassigned		
		Group Art Unit			
TOTAL AMOUNT OF PAYMENT	(\$) 160.00	Attorney Docket No.	1242/49/2		

Attorney Docket No.

METHOD OF PAYMENT (check all that apply)			FEE CALCULATION (continued)					
Check Credit card Money Other None			3. ADDITIONAL FEES					
x Deposit Account:		Large Entity   Small Entity						
Deposit Account.		Fee	Fee	Fee	Fee	Fee Description	Fee Paid	
Account Number	50-0426		105	e (\$) 130	205	e (\$) 65	Surcharge - late filing fee or oath	65.00
Deposit		127	50	227	25	Surcharge - late provisional filing fee or		
Account Jenkins & Wilson, P.A.		12,	50	221	25	cover sheet		
The Commissioner is authorized to: (check all that apply)    X   Charge fee(s) indicated below   Credit any overpayments			139	130	139	130	Non-English specification	ļ
X Charge fee(s) indicated below			147	2,520	147	2,520	For filing a request for ex parte reexamination	
Charge fee(s) indicated below, except for the filling fee		112	920*	112	920*	Requesting publication of SIR prior to Examiner action	ا بــا	
to the above-identified deposit account.		113	1,840*	113 1	1.840*	Requesting publication of SIR after	100	
	FEE C	ALCULATION	j				Examiner action	₹55.00
1. BASIC FI	LING FEE		115	110	215	55	Extension for reply within first month	עט•ננבין
Large Entity   Fee Fee	Small Entity Fee Fee	For Department	116	400		200	Extension for reply within second month	2
Code (\$)	Code (\$)	Fee Description Fee Paid	117	920 1,440		460 720	Extension for reply within third month	50(420
101 740	201 370	Utility filing fee		1,960		980	Extension for reply within fourth month	
106 330	206 165	Design filing fee		320		160	Extension for reply within fifth month	300 CH
107 510	207 255	Plant filing fee	119 120	320		160	Notice of Appeal	00000030 5.00 CH
108 740	208 370	Reissue filing fee	121	280		140	Filing a brief in support of an appeal Request for oral hearing	
114 160	214 80	Provisional filing fee		1,510	138 1		Petition to institute a public use proceeding	BAFRAIGA
SUBTOTAL (1) (\$) 0.00		140	110	240	55	Petition to revive - unavoidable	89	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE			141	1,280	241	640	Petition to revive - unintentional	2002
		Fee from Extra Claims below Fee Paid	142	1,280	242	640	Utility issue fee (or reissue)	
Total Claims	-20**	= X ===	143	460	243	230	Design issue fee	. 03 FC
Independent Claims	- 3**	= X ==	144	620	244	310	Plant issue fee	05.
Multiple Deper	ndent	=	122	130	122	130	Petitions to the Commissioner	
			123	50	123	50	Processing fee under 37 CFR 1.17(q)	
Large Entity Fee Fee	Small Entity Fee Fee	Fee Description	126	180	126	180	Submission of Information Disclosure Stmt	
Code (\$) 103 18	Code (\$) 203 9	Claims in excess of 20	581	40	581	40	Recording each patent assignment per property (times number of properties)	40.00
102 84	202 42	Independent claims in excess of 3	146	740	246	370	Filing a submission after final rejection	
104 280	204 140	Multiple dependent claim, if not paid	440	740	240	270	(37 CFR § 1.129(a))	<b> </b>
109 84	209 42	** Reissue independent claims over original patent	149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))	
110 18	210 9	** Reissue claims in excess of 20	179	740	279	370	Request for Continued Examination (RCE)	
and over original patent			169	900	169	900	Request for expedited examination of a design application	
SUBTOTAL (2) (\$) 0.00			Othe	Other fee (specify)				
**or number previously paid, if greater; For Reissues, see above			*Red	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 160.00				60.00

SUBMITTED BY Complete (if applicable) Registration No. Name (Print/Type) Arles A. Taylor, Jr. Telephone 39,395 919-493-8000 (Attorney/Agent) Signature April 29, 2002

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.





MP

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 2023I
www.uspto.gov

APPLICATION NUMBER

FILING/RECEIPT DATE

FIRST NAMED APPLICANT

ATTORNEY DOCKET NUMBER

10/000,151

10/30/2001

Jeffrey R. Balser

1242/49/2

CONFIRMATION NO. 8248

FORMALITIES LETTER

\*OC000000007371005\*

25297 JENKINS & WILSON, PA 3100 TOWER BLVD SUITE 1400 DURHAM, NC 27707

Date Mailed: 01/28/2002

#### NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

#### Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is unsigned.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(I) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.
- The balance due by applicant is \$65.

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
  - drawings submitted to the Office are not electronically reproducible. Drawing sheets must be submitted on paper which is flexible, strong, white, smooth, non-shiny, and durable (see 37 CFR 1.84(e));
- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of
  the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as
  indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a
  substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content
  of the sequence listing information recorded in computer readable form is identical to the written (on paper
  or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR
  1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

05/03/2002 BABRAHA1 00000030 500426 10000151

01 FC:205

65.00 CH





## For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase Patentin Software, call (703) 306-2600
- For Patentin Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

A copy of this notice MUST be returned with the reply.

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

indulist office

"Expresa Mail" mailing number.: ET871448814US

Date of Deposit \_ April 29, 2002 I hereby certify that this paper and all papers and fees referred to herein are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Commissioner of Patents, c/o U.S. Patent and Trademark Office, BOX SEQUENCE, P.O. Box 2327, Arlington,

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Balser et al.

**Examiner: Not Assigned** 

Application No.: 10/000,151

Group Art Unit: Not Assigned

Filed: October 30, 2001

Docket No.: 1242/49/2

Confirmation No.: 8248

For: HUMAN KCR1 REGULATION OF HERG POTASSIUM CHANNEL BLOCK

**Commissioner for Patents** c/o United States Patent and Trademark Office **BOX SEQUENCE** P.O. Box 2327 Arlington, Virginia 22202

### TRANSMITTAL OF FORMAL DRAWINGS

Dear Sir:

Please find enclosed a new set of formal drawings (9 sheets) for filing in the above-identified U.S. Patent Application.

The Commissioner is hereby authorized to charge any deficiencies of payment associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS & WILSON, P.A.

Date: Upril 29,2002

By:

Arles A. Taylor, Jr. Registration No. 39,395

Suite 1400 University Tower 3100 Tower Boulevard Durham, North Carolina 27707 Telephone: (919) 493-8000

Facsimile: (919) 419-0383

Customer No. Bar Code Label:

1242/49/2 AAT/haw



"Express Mail" mailing number.:

Pate of Deposit April 29, 2002

A hereby certify that this paper and all papers and fees referred to herein are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Commissioner of Patents, c/o U.S. Patent QUENCE, P.O. Box 2827, Arlington, and Trademark Office, BOX SE Virginia 22202

**PATENT** 

Holly A. Wolf

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Balser et al.

**Examiner: Not Assigned** 

Application No.: 10/000,151

Group Art Unit: Not Assigned

Filed: October 30, 2001

Docket No.: 1242/49/2

Confirmation No.: 8248

For: HUMAN KCR1 REGULATION OF HERG POTASSIUM CHANNEL BLOCK

STATEMENT THAT SEQUENCE LISTING AND COMPUTER READABLE COPY ARE THE SAME

Commissioner for Patents c/o United States Patent and Trademark Office **BOX SEQUENCE** P.O. Box 2327 Arlington, Virginia 22202

Sir:

In accordance with 37 C.F.R. §1.821(f), applicants hereby state that the Sequence Listing information recorded in computer readable form is identical to the written Sequence Listing (on paper or compact disc).

The Commissioner is hereby authorized to charge any deficiencies of payment associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS & WILSON, P.A.

Date: (Mil 29, 2002

Arles A. Taylor, Jr. Registration No. 39,395

Suite 1400 University Tower 3100 Tower Boulevard Durham, North Carolina 27707 Telephone: (919) 493-8000 Facsimile: (919) 419-0383

Customer No. Bar Code Label:

1242/49/2

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